

Application No. 10/019,617
Attorney Docket No. 12447US03

REMARKS

The present application includes claims 1-66. Claims 1-66 were rejected. By this Amendment, claims 2 and 35 have been canceled and claims 1, 3, 14, 26-29, 34, 36, 47, and 59-62 have been amended.

Claims 3, 14, 26-28, 36, 47, and 59-61 were objected to by the Examiner for several formalities. The claims have been amended as directed by the Examiner.

Claims 1-33 and 62-66 were rejected under 35 U.S.C. §112, first paragraph as failing to comply with the enablement requirement.

Claims 62-66 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

Claims 1-3, 13-18, 20-21, 25-31, 34-36, 46-51, 53-54, and 58-64 were rejected under 35 U.S.C. §102(e) as being anticipated by Yue, U.S. Pat. No. 6,026,356.

Claims 4-5, 22-24, 37-38, and 55-57 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yue in view of Swaminathan, U.S. Pat. No. 5,495,555.

Claims 6, 9, 39, and 42 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yue in view of Oshikiri, U.S. Pat. No. 5,878,387.

Claims 7-8 and 40-41 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yue in view of Ertem, U.S. Pat. No. 6,453,289.

Claims 10-12, 19, 43-45, and 52 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yue in view of Chen, U.S. Pat. No. 5,615,298.

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Claims 32-33 and 65-66 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yue in view of Navaro, U.S. Pat. No. 6,108,560.

The Applicant now turns to the rejection of claims 1-33 and 62-66 under 35 U.S.C. §112, first paragraph as failing to comply with the enablement requirement. The Examiner asserts that claims 1, 29, and 62 are single "means" claims and consequently asserts that the claims are subject to an undue breadth rejection, apparently applying MPEP 2164.08(a).

However, claims 1, 29, and 62 are not "means" claims. MPEP 2818(I) sets forth the requirements for a claim to be a "means" claims. Specifically, the claim limitation must use the phrase "means for" or "step for", the "means for" must be modified by functional language, and the "means for" must not be modified by sufficient structure. However, none of claims 1, 29, or 62 include the "means for" language and consequently are not "means" claims.

However, in a effort to move prosecution along, claims 1, 29, and 62 have been rewritten in a format that it is hoped is more acceptable to the Examiner.

The Applicant now turns to the rejection of claims 62-66 were under 35 U.S.C. §101 as being directed to non-statutory subject matter. More specifically, the Examiner asserts that claim 62 is directed to a method comprising "adjusting first bits and second

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bits” and that the use of such language indicates that claim 62 is directed to an abstract idea that does not product a useful, concrete, tangible result.

However, claim 62 recites “adjusting said first bits and said second bits in response to said second bits whereby the noise characteristic in the digital signals is controlled” (emphasis added). The Applicant respectfully submits that controlling the noise characteristic of a digital signal is certainly a useful and tangible result. Further, this useful and tangible result is already recited in claim 62. Consequently, the rejection is respectfully traversed.

The Applicant now turns to the rejection of claims 1-3, 13-18, 20-21, 25-31, 34-36, 46-51, 53-54, and 58-64 under 35 U.S.C. §102(e) as being anticipated by Yue, U.S. Pat. No. 6,026,356. Yue teaches a system for noise conditioning signals representative of audio information in compressed and digitized form. In Yue, Linear Predictive Coding (LPC) data frames are received and processed without any decompression. That is, as recited beginning at Col. 4, Line 1, the data frame includes a coefficients segment and an excitation segment and, as described beginning at Col. 4, Line 27, the coefficients in the coefficients segment are re-computed using a longer analysis window in order to perform noise conditioning.

As shown in Figure 1, of Yue, the input data frame is received by the speech detector 400 and then just the LPC coefficients are passed to the frequency response calculator 406 without decompression. Also, the rest of the data frame without the LPC

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coefficients is passed to the data frame builder 405 without decompression. The data frame builder 405 also receives the new set of LPC coefficients and reconstructs the data frame into a new data frame that is passed to output 112 (because the data frame had not been decompressed, no recompression is necessary after the data frame has been reconstructed). Thus, as shown in Figure 1, Yue does not include any decoding step. Indeed, Yue states that "decompression of the signal occurs only at the second mobile terminal" (Col. 2, Lines 63-65) which is destination terminal.

Conversely, Figure 33 of the present application shows an embodiment of a new way of processing the coded signal parameters. More specifically, the coded parameters are passed to two decoders, a reference decoder 20, and an encoder that estimates the destination decoder 120. Both decoders decode the coded parameters. The destination decoder 120 uses the decoded parameters to generate an estimated clean speech output 148 that is transmitted to the receiver.

The present application includes independent claims 1, 29, 34, and 62, each of which has been amended to recite the limitation of performing a plurality of decoding operations, which is respectfully submitted to be absent from Yue. Consequently, independent claims 1, 29, 34, and 62 are respectfully submitted to be allowable, as are dependent claims 2-3, 13-18, 20-21, 25-28, 30-31, 35-36, 46-51, 53-54, 58-61, and 63-64.

The Applicant now turns to the rejection of claims 4-5, 22-24, 37-38, and 55-57 under 35 U.S.C. §103(a) as being unpatentable over Yue in view of Swaminathan, U.S.

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Pat. No. 5,495,555. Claims 4-5, 22-24, 37-38, and 55-57 depend from independent claims 1 and 34, which are respectfully submitted to be allowable in light of the amendment above. Consequently, dependent claims 4-5, 22-24, 37-38, and 55-57 are also respectfully submitted to be allowable.

The Applicant now turns to the rejection of claims 6, 9, 39, and 42 under 35 U.S.C. §103(a) as being unpatentable over Yue in view of Oshikiri, U.S. Pat. No. 5,878,387. Claims 6, 9, 39, and 42 depend from independent claims 1 and 34, which are respectfully submitted to be allowable in light of the amendment above. Consequently, dependent claims 6, 9, 39, and 42 are also respectfully submitted to be allowable.

The Applicant now turns to the rejection of claims 7-8 and 40-41 under 35 U.S.C. §103(a) as being unpatentable over Yue in view of Ertom, U.S. Pat. No. 6,453,289. Claims 7-8 and 40-41 depend from independent claims 1 and 34, which are respectfully submitted to be allowable in light of the amendment above. Consequently, dependent claims 7-8 and 40-41 are also respectfully submitted to be allowable.

The Applicant now turns to the rejection of claims 10-12, 19, 43-45, and 52 under 35 U.S.C. §103(a) as being unpatentable over Yue in view of Chen, U.S. Pat. No. 5,615,298. Claims 10-12, 19, 43-45, and 52 depend from independent claims 1 and 34, which are respectfully submitted to be allowable in light of the amendment above.

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Consequently, dependent claims 10-12, 19, 43-45, and 52 are also respectfully submitted to be allowable.

The Applicant now turns to the rejection of claims 32-33 and 65-66 under 35 U.S.C. §103(a) as being unpatentable over Yue in view of Navaro, U.S. Pat. No. 6,108,560. Claims 32-33 and 65-66 depend from independent claims 29 and 62, which are respectfully submitted to be allowable in light of the amendment above. Consequently, dependent claims 32-33 and 65-66 are also respectfully submitted to be allowable.

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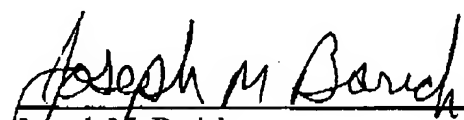
CONCLUSION

If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Account No. 13-0017.

Respectfully submitted,

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Joseph M. Barich
Registration No. 42,291

MCANDREWS, HELD & MALLOY, LTD.
500 West Madison Street, 34th Floor
Chicago, IL 60661

Telephone: (312) 775-8000
Facsimile: (312) 775-8100